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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,999	12/03/2003	Hung Chow	402901	5187

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EXAMINER

TILL, TERRENCE R

ART UNIT PAPER NUMBER

1744

DATE MAILED: 11/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/725,999	CHOW, HUNG	
	<b>Examiner</b>	<b>Art Unit</b>	
	Terrence R. Till	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1, 3, and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al. (US 2002/0095741) in view of Black & Decker (EP 0 728 435).

4. The publication to Inoue et al. discloses an upright cyclone vacuum cleaner comprising: an upper casing 1 housing an electric motor 2 having an output shaft and a suction fan 3 mounted upon the output shaft, a cylindrical dust receptacle 15 defining a cylindrical cyclone chamber situated beneath the suction fan and having an inlet port 9 and having a "pan" (bottom wall of receptacle), a longitudinal axis of the cyclone chamber being co-linear with the output shaft, situated beneath the cyclone chamber, the cyclone chamber includes an upper tube 19 having a frusto-conical inlet opening, a longitudinal axis of the dust receptacle being co-linear with the output shaft, an agitator 8a mounted in a pickup head 8 situated beneath the dust receptacle and

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communicating with the inlet port via a duct. Inoue et al. does not disclose a funnel delimiting the cyclone chamber from the dust receptacle, and a pickup head. The European patent to Black & Decker discloses a cyclone vacuum cleaner having the same general layout as the upper casing of the Inoue et al. vacuum cleaner and additionally discloses a funnel 47 delimiting the cyclone chamber from the dust receptacle, and a pickup head. Therefore it would have been obvious to a person skilled in the art at the time the invention was made to provide the vacuum cleaner of Inoue et al. with a funnel delimiting the cyclone chamber from the dust receptacle in view of the teaching of Black & Decker in order to assist in the removal of dust and debris from the airflow (See Black & Decker patent, column 3, lines 40-45).

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al. (US 2002/0095741) in view of Black & Decker (EP 0 728 435) as applied to claim 1 above, and further in view of Japanese patent to Hirano et al. (JP 3-264023).

6. The device of Inoue et al., as modified by Black & Decker, discloses the claimed invention except that Inoue et al. does not disclose that the pickup head has a rotary brush therein caused to rotate by airflow induced by the suction fan. The Japanese patent to Hirano et al. shows that having a rotary brush 25,26 caused to rotate by airflow 14-19 induced by the suction fan is an equivalent structure known in the art. Therefore, because the means of rotating an agitator by airflow induced by the suction fan were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute the drive of Inoue et al., as modified by Black & Decker, with the airflow driven agitator assembly of Hirano et al.

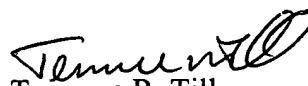
***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents to Coombs, Conrad et al., Scalfani et al., Van der Molen and Japanese patent to Ito et al. show the current state of the art in cyclonic vacuum cleaners with the motor mounted on top of the dirt receptacle.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terrence R. Till whose telephone number is (571) 272-1280. The examiner can normally be reached on Mon. through Thurs. and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys P. Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Terrence R. Till  
Primary Examiner  
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